Installation Guide

MXT-700 7" Modero X® Series Tabletop Touch Panel

Overview

The MXT-700 7” Modero X® Series Tabletop Touch Panel (**FG5968-04**) provides several industry firsts, including a beautiful, capacitive multi-touch screen that provides users access to multiple applications with minimal navigation. The Modero X Series is the most elegant family of interfaces designed specifically for dedicated room control. This new generation of touch panels is built for usability offering edge-to-edge capacitive touch glass with multi-touch capabilities. It features advanced technology empowering users to operate AV equipment seamlessly, while providing the ultimate in audio and video quality. The distinctive appearance will complement even the most sophisticated meeting facilities and homes. With a lightning fast processor, brilliant graphics and enhanced capabilities, the Modero X Series is the control surface that simply delivers more.

For more information on installation and configuration, please refer to the *MXT/MXD-700 Operation Reference Guide*, available at **www.amx.com**.

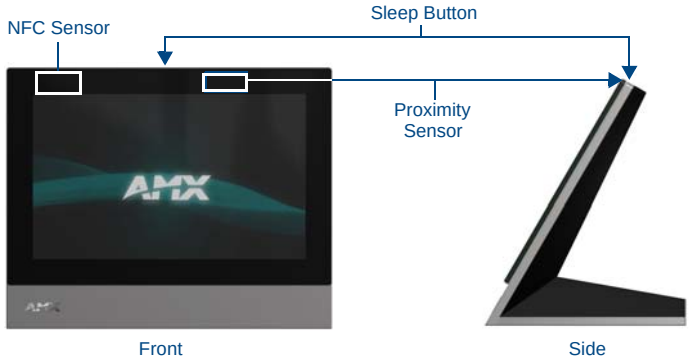

FIG. 1 MXT-700

Common Application

The MXT-700 is intended for boardrooms, conference rooms, or auditoriums where a panoramic control surface is needed to provide access to multiple functions simultaneously while remaining elegantly unobtrusive. In residences, it is perfect for kitchens, home theaters, or home offices where the panoramic control surface can be used to manage systems throughout the house.

Product Specifications

MXT-700 (FG5968-04) Specifications	
Power:	PoE (Power over Ethernet), 802.3af, class 3
Power Consumption:	• *Full-On:* 8W maximum • *Standby:* 3.2 W • *Shutdown:* 1 W • *Startup Inrush Current:* Not Applicable due to PoE standard
Front Panel Components:	
NFC Transceiver:	Antenna and transceiver for Near Field Communications device detection and interaction.
Light Sensor:	Photosensitive light detector for automatic adjustment of the panel brightness.
Motion Sensor:	Proximity detector to wake the panel when it is approached. • *Typical Range:* 1 foot (30.48 cm) • *Maximum Range:* 3 feet (91.44 cm) • *Range width:* 10 degrees
Sleep Button:	Single button on top of panel for placing panel in sleep mode, for powering off the panel, and for accessing the Settings Pages.
Microphone:	-42dB ± 3dB sensitivity FET microphone
Speakers:	4 ohm, 2 Watt, 300Hz cutoff frequency
Rear Panel Components:	
USB connections:	2 easily accessible USB ports on rear of base, used for connection to keyboard, mouse, or other peripherals.
Ethernet 10/100 Port and Cable:	10/100 port, RJ-45 connector through cable extension for Ethernet connectivity and PoE.
Touch Panel Display:	
Display Type:	TFT Active Matrix Color LCD with In-Plane Switching (IPS) technology.
Display Size:	7.3" x 4.8" (186 mm x 122 mm), 8.8" (222 mm) diagonal
Viewable Area:	6.05" x 3.54" (154 mm x 90 mm), 7.0" (178 mm) diagonal

MXT-700 (FG5968-04) Specifications (Cont.)	
Touch Panel Display (Cont.):	
Viewing Angle:	• Vertical: ± 89° • Horizontal: ± 89°
Screen Resolution (W x H):	1024x600
Aspect Ratio (W x H):	16x9
Brightness:	400 cd/m2
Contrast Ratio:	800:1
Color Depth:	16,7M colors
Backlight Type:	LED
Touch Overlay:	Projected Capacitive; Multi-touch support, 3 simultaneous max.
Communications:	
Ethernet:	10/100 port, RJ-45 connector. Supported IP and IP-based protocols: UCP, TCP, ICMP, ICSP, IGMP,DHCP, Telnet, FTP, DNS, RFB (for VNC), HTTP
USB:	2 - USB host 2.0, Type A ports
Near Field Communications (NFC):	Supports standards ISO/IEC 15693, ISO/IEC 14443A, ISO/IEC 14443B; Unique Identifier (UID), Typ Range=.25”, Max = .5"
Bluetooth:	HID Profile v1.1, Keyboard/Mouse Support, requires MXA-BT Bluetooth Adaptor
Video:	
Supported Video Codecs:	• MPEG2-TS: MPEG-2 Main Profile @High Level up to 720p at 25 fps (decode only) • MJPEG up to 720p at 25 fps (decode only)
Streaming/File Formats:	MPEG-TS for MPEG-2; HTTP for MJPEG
Audio:	
Streaming/File Formats:	WAV, MP3 (as part of touch panel file only - no USB storage)
Intercom:	Full Duplex VoIP, SIP v2.0 (supported with AMX-CSG)
Operating Environment:	• Operating Temperature: 32° F to 104° F (0° C to 40° C) • Storage Temperature: 4° F to 140° F (-20° C to 60° C) • Humidity Operating: 20% to 85% RH • Humidity Storage: 5% to 85% RH
Dimensions (HWD):	5" x 7 5/16” x 4 1/8" (126 mm x 187 mm x 105 mm)
Weight:	1.8 lbs (0.82 kg)
Certifications:	• FCC Part 15 Class B • C-Tick CISPR 22 Class B • CE EN 55022 Class B and EN 55024 • CB Scheme IEC 60950-1 • IC • IEC/EN-60950 • RoHS
Included Accessories:	• MXT-700 Installation Guide (**93-5968-04**) • MXA-USB-C, USB Port Cover Kit, Modero X Series Touch Panel (**FG5968-18**) • HPG-10 .75-inch HydraPort .75-IN. Grommet (**FG570-01**) • MXA-CLK, Modero X Series Cleaning Kit (**FG5968-16**)
Other AMX Equipment:	• PS-POE-AT, High-Power PoE Injector (**FG423-81**) • PS-POE-AF-TC, POE Injector, 802.3af Compliant (**FG423-83**) • MXA-BT Bluetooth USB Adaptor (**FG5968-19**) • NXA-ENET8POE, Gigabit PoE Ethernet Switch (**FG2178-62**) • NXA-ENET8-2POE, Gigabit Switch, 8 Port POE, 2 Port SFP (**FG2178-63**)

NOTE: The MXT-700-NC (**FG5968-27**) No Comm touch panel does not have camera or microphone capability. It otherwise has all of the functionality of the MXT-700 panel.

Panel Connectors and Wiring

Any USB peripherals (mouse, keyboard, etc.) may be connected to one of the two USB ports on the rear of the device (FIG. 2). Updates to the device's firmware are also made via the USB ports.

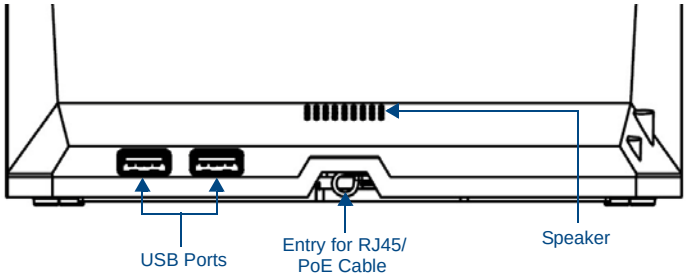

FIG. 2 Connectors on the rear of the MXT-700

Power via Power Over Ethernet

Power for the MXT-700 is supplied via Power Over Ethernet (PoE), utilizing an AMX-certified, capacitive touch-compliant PoE injector such as the PS-POE-AT High Power PoE Injector (**FG423-81**) or equivalent PoE device. If using a PoE injector, the PoE injector should be installed between the MXT-700 and the incoming Ethernet cable, and connected to the RJ45 port on the cable attached to the device (FIG. 3).

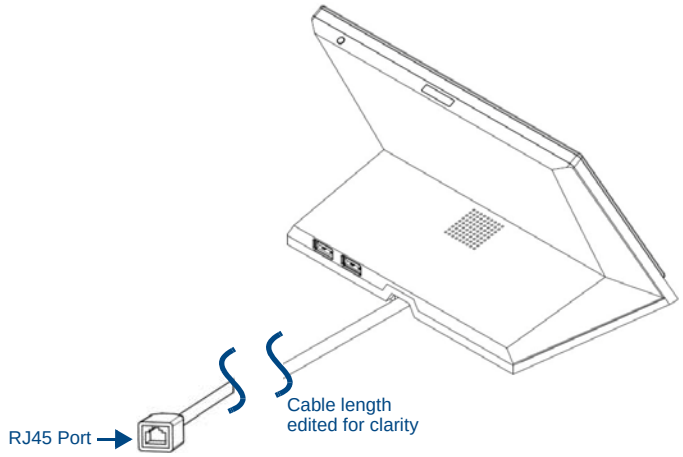

FIG. 3 Back of the MXT-700, showing RJ45 port and cable for PoE

Ethernet Cable Installation and Modification

In installations where you wish to conceal the Ethernet cable, a hole at least 1.00" (2.54 cm) in diameter is required in the surface to allow passage of the female RJ45 connector (FIG. 3). If using a smaller hole is unavoidable, you will need to disconnect the Ethernet cable (**ECA5968-05**) from the device.

NOTE: *The minimum diameter hole through which the Ethernet cable may pass is 0.50" (1.27 cm).*

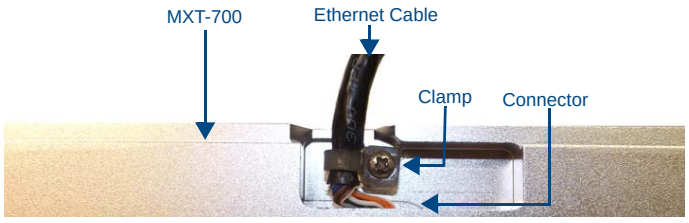

FIG. 4 Bottom of the MXT-700

To disconnect and reconnect the MXT-700's Ethernet cable to allow use of a hole smaller than 1.00" in diameter:

1. On a soft surface, turn the MXT-700 face-down to access the bottom of the device.
2. Remove the clamp holding the Ethernet cable (FIG. 4) until the Ethernet cable moves freely.
3. Remove the Ethernet cable connector and pull the cable out of the clamp.
4. Pass the Ethernet cable (**ECA5968-05**) through the hole, with the RJ45 connector on the other side of the installation surface from the device.
5. Press the Ethernet cable back into the clamp. Do NOT tighten the clamp at this time.
6. Using a nonconductive item such as a wooden stick, reinsert the Ethernet cable connector into the device. Use the stick to ensure that the connector is properly seated.
7. Tighten the clamp to secure the Ethernet cable. Make sure the clamp is around the bundled black cable, not the individual wires.
8. Connect the RJ45 connector to its incoming Ethernet cable and apply power.

Configuring the MXT-700

The MXT-700 is equipped with Settings Pages that allow you to set and configure various features on the panel. For more information on connecting and configuring the MXT-700 to a network, please refer to the *Modero X Series Programming Guide*, available at **www.amx.com**.

Accessing the Settings Pages

To access the Settings Pages on the MXT-700, press and hold the **Sleep** Button (FIG. 1) on the top of the panel for 3 seconds. The user will be prompted to release the button to enter the *Settings* page.

Accessing the Configuration Page

1. From the *Settings* Page, select *Configuration*. If the *Configuration* page is password protected, this opens a password keypad.
2. Enter the panel password into the keypad (the default is ***1988)*** and select **OK** to access the page.

Setting the Panel's Device Number and Device Name

In the *Configuration* page:

1. Press *Panel* to open the *Panel Configuration* page.
2. Ensure that the *Synchronize Device Names* button is not selected, and click it to deselect it if it is.
3. Press *Device Number* to open the Device Number keypad.
4. Enter a unique Device Number assignment for the panel and press **OK.**
5. Press the *Device Name* field to open the Device Name keypad.
6. Enter a unique Device Name assignment for the panel and press **OK**.
7. Click the arrow on the top left of the page once to return to the *Configuration* page and twice to return to the *Settings* page.

Accessing the Connection & Networks Page

1. From the Settings Page, select *Connection & Networks*. If the page is password protected, this opens a password keypad.
2. Enter the panel password into the keypad (the default is ***1988)*** and select **OK** to access the page.

Connecting to a Master

The panel requires that you establish the type of connection you want to make between it and your Master.

In the *Connection & Networks* page:

1. Select **Master Connection** to open the *Master Connection* page
2. Press *Mode* to toggle through the available connection modes:

Connection Modes

Mode	Description	Procedures
Auto	The device connects to the first master that responds. This setting requires that you set the System Number.	Setting the System Number: 1. Select Master System Number to open the keypad. 2. Set your Master System Number and select **OK**.
URL	The device connects to the specific IP of a master via a TCP connection. This setting requires that you set the Master's IP.	Setting the Master IP: 1. Select the Master IP number to the keyboard. 2. Set your Master IP and select **OK**.
Listen	The device "listens" for the Master to initiate contact. This setting requires you provide the master with the device's IP.	Confirm device IP is on the Master URL list. You can set the Host Name on the device and use it to locate the device on the master. Host Name is particularly useful in the DHCP scenario where the IP address can change.

3. If you have enabled password security on your Master, you need to set the user-name and password within the device.
   a. Select *Username* to open the Master User keyboard.
   b. Set your Username and select **OK**.
   c. Select the *Password* to open the Master Password keyboard.
   d. Set your Master Password and select **OK**.
   e. Press the **Back** button twice to return to the *Settings* page.

Configuring the Panel to a Network

The first step is to configure the panel's communication parameters. This only configures the panel to communicate with a network, and it is still necessary to tell the panel with which Master it should be communicating.

Network Communication With a DHCP Address

In the *Connection & Networks* page:

1. Select **Network Connection** to open the *Network Connection page.*
2. Toggle the *DHCP/Static* field until the choice cycles to *DHCP.* This action causes all fields on the page (other than *Host Name*) to be greyed-out.
3. Select *Host Name* to open the Host Name keyboard. Enter the new host name and click **OK**.

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